AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of generating on an output line a high-power modulated radio frequency signal from a low or medium frequency information signal, comprising:

pulse-shaping the information signal using sampling having a sampling frequency to form a digital signal having at least two discrete signal values;

generating for each of the two discrete signal values a corresponding alternating current (AC) radio frequency carrier signal including a first AC radio frequency carrier signal for a first one of the two discrete signal values and a second different AC radio frequency carrier signal for a second one of the two discrete signal values;

using each discrete signal value to control connecting its ~~the~~ corresponding AC radio frequency carrier signal to the output line to produce a switched radio frequency signal carrying the information signal; and

filtering the switched radio frequency signal for obtaining the high-power modulated radio frequency signal,

wherein in connecting the different corresponding AC radio frequency carrier signals to the output line, the times at which the connecting of any of the different AC radio frequency carrier signals is started or ended are chosen to coincide with a moment at which the respective AC radio frequency carrier signal is equal to zero or is close to zero to avoid energy losses during the starting or ending of the connecting.

2. (Currently Amended) The method according to claim 1, wherein in the step of generating, the AC radio frequency carrier signals are generated to have frequencies being multiples of the sampling frequency of digital signal.

3. (Currently Amended) A method of generating on an output line a high-power modulated radio frequency signal from a low or medium frequency information signal, comprising:

pulse-shaping the information signal using sampling having a sampling frequency to form a digital signal having at least two discrete signal values;

generating for each of the two discrete signal values a corresponding alternating current (AC) radio frequency carrier signal including a first AC radio frequency carrier signal for a first one of the two discrete signal values and a second different AC radio frequency carrier signal for a second one of the two discrete signal values;

using each discrete signal value to control connecting its ~~the~~ corresponding AC radio frequency carrier signal to the output line to produce a switched radio frequency signal carrying the information signal; and

filtering the switched radio frequency signal for obtaining the high-power modulated radio frequency signal,

wherein in the step of generating, the different AC radio frequency carrier signals are generated to be different sinusoidal signals.

4. (Previously Presented) The method according to claim 3, wherein in the step of filtering, a band-pass filtering is made rejecting distortion or an unwanted side band produced by the controlled connecting of the carriers.

5. (Canceled).

6. (Currently Amended) A method of generating on an output line a high-power modulated radio frequency signal from a low or medium frequency information signal, comprising:

pulse-shaping the information signal using sampling having a sampling frequency to form a digital signal having at least two discrete signal values;

generating for each of the two discrete signal values a corresponding alternating current (AC) radio frequency carrier signal including a first AC radio frequency carrier signal for a first one of the two discrete signal values and a second different AC radio frequency carrier signal for a second one of the two discrete signal values;

using each discrete signal value to control connecting its ~~the~~ corresponding AC radio frequency carrier signal to the output line to produce a switched radio frequency signal carrying the information signal; and

filtering the switched radio frequency signal for obtaining the high-power modulated radio frequency signal,

wherein in the step of generating, the different AC radio frequency carrier signals are generated as non-sinusoidal signal to be sums of frequency components, all of the components having frequencies being integer multiples of the sampling frequency.

7. (Currently Amended) The method according to claim 6, wherein in the step of generating, the AC radio frequency carrier signals are generated to stay close to zero for a time period at or around the times at which the connecting of any of the AC radio frequency carrier signals is started or ended.

8. (Currently Amended) The method according to claim 1, wherein the information signal is quadrature shifted into two components so that, in the step of pulse-shaping, two digital

signals are formed, each having at least two discrete signal values, and that in the step of generating, AC radio frequency carrier signals are generated for each of the signal values of the two digital signals, the AC radio frequency carrier signals generated for the signal values of one of the digital signals having a 90 degrees phase-difference in relation to the AC radio frequency carriers generated for the signal values of another of the two digital signals.

9. (Previously Presented) The method according to claim 8, wherein side-bands associated with the switched radio frequency signal are used as two linearly independent channels as in the quadrature phase I and Q arrangement.

10. (Previously Presented) The method according to claim 8, wherein when one band-pass filter is used, the signals are added before the filter.

11. (Canceled).

12. (Original) The method according to claim 8, wherein the filter(s) is/are (a) band-pass filter(s) rejecting distortion achieved by the amplification.

13. (Previously Presented) The method according to claim 1, wherein in the step of pulse-shaping, a digital signal having only two signal values is formed.

14. (Currently Amended) Apparatus for generating a high-power modulated radio frequency signal from a low or medium frequency information signal, comprising:

a quantifier for pulse-shaping, according to a sampling frequency, the information signal to form a digital signal having at least two discrete signal values;

a switching unit connected to the quantifier to receive the digital signal and including multiple alternating current (AC) radio frequency carrier signal generators~~, one individual~~ including a first AC radio frequency carrier signal generator provided for and associated with a

first ~~each~~ of the at least two discrete signal values and a second AC radio frequency carrier signal generator provided for and associated with a second of the at least two discrete signal values; and

a filter connected to an output line of the switching unit for providing the high-power modulated radio frequency signal,

wherein the switching unit includes switches for providing a switched radio frequency signal carrying the information content of the information signal, and

wherein each of the switches is associated with and controlled by one of the digital signal values to connect the one of the first and second AC radio frequency carrier signal generators ~~generator~~ associated with the signal value to the output line when the digital signal adopts the respective signal value and to disconnect the one AC radio frequency carrier signal generator when the digital signal does not adopt the respective signal value.

15. (Original) The apparatus according to claim 14, wherein the quantifier comprises a sigma-delta modulator.

16. (Currently Amended) The apparatus according to claim 14, wherein the filter is a band-pass filter for rejecting unwanted signals and distortion achieved by controlled connecting and disconnecting of the AC radio frequency signal generators.

17. (Currently Amended) The apparatus according to claim 14, wherein the AC radio frequency carrier signal generators includes a transformer coupled to a single AC radio frequency carrier generator element to generate AC radio frequency carrier signal voltages having different amplitudes.

18. (Currently Amended) The apparatus according to claim 14, wherein the quantifier is configured to generate the digital signal values to connect or disconnect the AC radio frequency

carrier signals at times when the AC radio frequency carrier signals have a magnitude at or near zero.